

**UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF TEXAS
WACO DIVISION**

SOLAS OLED LTD., an Irish corporation,

Plaintiff,

v.

LG DISPLAY CO., LTD., a Korean corporation; LG ELECTRONICS, INC., a Korean corporation; and SONY CORPORATION, a Japanese corporation,

Defendants.

CASE NO. 6:19-CV-00236-ADA

JURY TRIAL DEMANDED

DEFENDANTS' REPLY CLAIM CONSTRUCTION BRIEF

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I. INTRODUCTION

Defendants propose constructions of the disputed claim terms that ascribe to them their proper meanings, as compelled by the context of the intrinsic record. Solas, on the other hand, pays little heed to the patents' specifications or prosecution histories, instead defining the disputed terms in the abstract and consulting the intrinsic record only (if at all) to look for instances of "lexicography" or "disclaimer." Yet even when there *is* a clear disclaimer, Solas diminishes the applicants' own statements about what they invented, instead arguing for unduly broad, litigation-driven constructions. Respectfully, the Court should adopt Defendants' constructions.

II. '137 PATENT

A. "a gradation current having a current value" (claims 10, 36)

The parties agree there are two relevant types of drive circuits for OLED pixels: (1) current-driven, which use a current having a value corresponding to a luminance level, and (2) voltage-driven, like the prior art, which use a voltage having a value corresponding to a luminance level. Dkt. 67 ("Def. Op.") at 6-7; Dkt. 67-2 ("Holberg Op. Decl.") ¶¶ 53-54. Defendants' construction makes clear what Solas's own expert concedes is *fundamental* to the '137 patent: the claimed "gradation current having a current value" is used only in the former, current-driven drive circuits, not the latter. Ex. 36 ("Flasck Dep.") at 67:21-68:2, 68:10-14; *see id.* at 67:10-70:17.

The distinction between current- and voltage-driven pixels is described throughout the '137 patent's specification. Def. Op. at 6-7. The applicants also were forced to narrow their broad claims that referred to any type of gradation signal (voltage *or* current) to claim only a current-driven pixel to overcome a rejection based on Ono, which discloses a voltage-driven pixel. Def. Op. at 7; Holberg Op. Decl. ¶¶ 50-52. Solas argues that the patentees did not disavow voltage-driven drive circuits because the relevant statements from the prosecution history come from "two different paragraphs." Dkt. 70 ("Sol. Resp.") at 4. But the applicants' two statements were made

in consecutive sentences, in a single argument distinguishing their invention from Ono. Dkt. 67-8 (Ex. 7) at 32. Despite Solas's conclusory and unsupported assertions otherwise (*see* Sol. Resp. at 3-4), this unambiguous disclaimer of voltage-programmed pixels amply supports the “not voltage” requirement in Defendants' construction. Def. Op. at 7-8; Dkt. 71 (“Def. Resp.”) at 4-5.

Solas mischaracterizes Defendants' construction, arguing it would require that “there not also be a voltage present” in the claimed current-driven pixel. Sol. Resp. at 3. Solas is wrong. Defendants' construction requires that the claimed “gradation current” is an actual current, not a voltage like in a voltage-driven pixel. It does not exclude the existence of any related voltages in the circuit, but requires that the actual current “correspond to the luminance gradation” of the pixel (i.e., it is a current-driven circuit). The “actual current” that has a “value corresponding to a luminance level” in Defendants' construction simply distinguishes the claimed “gradation current” from other types of temporary and incidental currents that can occur in voltage-driven pixels, which even Solas's expert agrees are outside the scope of the claims. Flack Dep. at 60:25-61:13, 64:1-25, 65:14-20.

B. “gradation signal” (claims 10, 15, 36, 37, 39)

Solas contends that because “signal” alone may have a plain meaning, there is “no justification for construing the well understood term at all.” Sol. Resp. at 5. But the claim term at issue is “gradation signal,” which is narrower than “signal” in the abstract. Defendants make clear what that “gradation signal” is, a “gradation¹ current with a current value sent to a pixel to set a luminance gradation,” in view of the surrounding claim context, the specification, and the prosecution history. Def. Op. at 9; Def. Resp. at 6-8. Consistent with Defendants' construction, Solas's own

¹ Solas's suggests that because “gradation” is used in Defendants' construction, Defendants construe only the term “signal.” *See* Sol. Resp. at 6-7. Not so. “Gradation” is already separately construed as part of the phrase “gradation current having a current value.”

expert testified that “fundamentally the ’137 requires a gradation current that supplies information to the pixel.” Flasck Dep. at 67:10-68:14.

Solas is right that when “gradation signal” is construed correctly, as Defendants propose, dependent claims 15 and 39 fall outside the scope of the independent claims, which renders claims 15 and 39 indefinite. This is the result of the patentees’ failure to update their dependent claims after amending and narrowing the independent claims, creating an irreconcilable inconsistency between the two. Def. Op. at 9. While independent claims are normally construed to be broader than dependent claims, that rule of construction does not govern where the plain meaning of the independent claims is of more limited scope. *See Enzo Biochem Inc. v. Applera Corp.*, 780 F.3d 1149, 1156-57 (Fed. Cir. 2015) (“dependent claims cannot broaden an independent claim from which they depend”). That is the case here. The applicants limited the claims to “gradation signals” that are “gradation currents” during prosecution to avoid prior art. Def. Op. at 8-10; Def. Resp. at 6-10. Their failure to conform dependent claims 15 and 39 to match the scope of the independent claims invalidates the dependent claims; it does not justify impermissibly expanding the independent claims to recapture claim scope surrendered in prosecution to obtain their patent. *See Regents Univ. of Cal. v. Dakocytomation Cal., Inc.*, 517 F.3d 1364, 1375-76 (Fed. Cir. 2008); *N. Am. Vaccine, Inc. v. Am. Cyanamid Co.*, 7 F.3d 1571, 1577-78 (Fed. Cir. 1993).

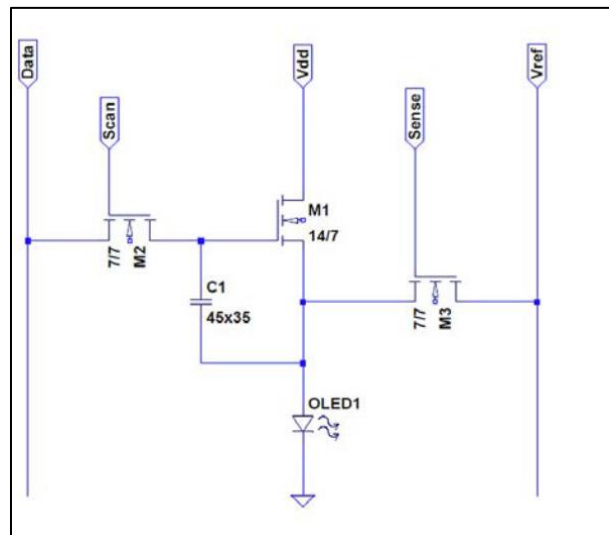
C. “generates, as the gradation signal, a non-light emitting display voltage having a predetermined voltage value” / “a non-light emitting display voltage having a predetermined voltage value for allowing the optical element to perform a non-light emitting operation is generated as the gradation signal” (claims 15, 39)

The proper construction of these terms in the dependent claims, which recite a “voltage” as the purported “gradation signal,” rises and falls with the construction of “gradation signal” discussed above. Def. Op. at 9-10. Solas incorrectly contends the Court cannot construe these claims in a way that exposes their indefiniteness unless Defendants submitted expert testimony. Sol.

Resp. 8-9. That is not the law. The Court does not need extrinsic testimony to find indefiniteness where, as here, that conclusion is a legal one compelled by basic canons of claim interpretation applied to the intrinsic evidence. *See, e.g., Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1370 n.6 (Fed. Cir. 2014). If the Court does deem it useful to consult extrinsic evidence, Solas’s expert concedes that if “gradation signal” in the independent claims is construed to be a gradation current, this cannot be reconciled with the “voltage” and “voltage value” requirements of dependent claims 15 and 39. Flasck Dep. at 102:20-103:19, 104:11-13. Similarly, in response to questioning by Solas’s counsel, Defendants’ expert Dr. Holberg testified that he too could not understand or figure out what was meant by claims 15 and 39. Ex. 37 (“Holberg Dep.”) at 58:22-59:4.

D. “through a data line ... through the data line ... through the data line” (claims 10, 36)

Solas does not dispute that the claims require three functions (detecting, applying, and supplying) to be performed “through the data line.” Below is Solas’s own reverse-engineered circuit diagram of a display pixel in the accused products, which provides meaningful context regarding this dispute. *Serio-US Indus., Inc. v. Plastic Recovery Techs. Corp.*, 459 F.3d 1311, 1319 (Fed. Cir. 2006) (“a trial court may consult the accused device for context that informs the claim construction process”); Dkt. 32 (“Second Am. Compl.” ¶ 11). Solas asserts the vertical line on the far left labeled “Data” is used to perform the supplying and applying functions, and the separate vertical line “Vref” on the right is used to perform the “detecting” function. Ex. 38 (’137



Infringement Contentions) at 7 (detecting), 12 (applying), 14 (supplying). Thus, the claim construction dispute is whether the *same* line (i.e., the actual data line labeled “Data”) must perform all three functions, or if the functions can be split among different lines (i.e., the data line and “Vref”) as Solas proposes. The claim language, specification, and prosecution history are dispositive that the same line is used for all three functions. Def. Op. at 11-12; Def. Resp. at 10-11.

Solas characterizes this as a “legal dispute,” and alleges that “in similar circumstances, courts have held multiple recited functions need not be performed by a single element.” Sol. Resp. at 10-11. Yet the only Federal Circuit case Solas relies on is *Elkay Mfg. Co. v. Ebco Mfg. Co.*, 192 F.3d 973, 977 (Fed. Cir. 1999), which came to the *opposite conclusion*. Solas argues that the *Elkay* Court found that the claim language *alone* was not “necessarily” limited to a single feed tube with a single flow path for both liquid and air (*see* Sol. Resp. at 11, *Elkay*, 192 F.3d at 977), but ignores the term was still “properly interpreted to refer to a *single feed tube with a single flow path for both liquid and air*” in view of the claim language, the written description, and the prosecution history. *Id.* at 979.² If the Court determines the claim language on its own does not compel Defendants’ construction, *Elkay* is indeed instructive. In that case, the claims were limited to performing all functions through the same feed tube because (1) that was disclosed in every figure, and (2) during prosecution the applicant distinguished prior art disclosing separate tubes for liquid and air. *Id.* at 978-979. Likewise, every embodiment in the ’137 patent discloses the *same* data line used for the claimed functions (Def. Resp. at 11), and in prosecution the applicants distinguished Ono’s use of two lines to perform them. Def. Op. at 11-12.

Solas tries to do away with the applicants’ disclaimer because *the prior art* did not “characterize” the line that performed the detecting function as “a data line” like in the amended claim.

² Emphasis added throughout unless otherwise noted.

Sol. Resp. at 11-12 (referring to Ono’s “grounding” line). Solas’s arguments fail. First, that the prior art uses a different word than the claim for the same concept is insufficient to distinguish it. *See, e.g., In re Bond*, 910 F.2d 831, 832 (Fed. Cir. 1990) (holding that invalidity is not an “ipsisimilis verbis” test). Second, the applicants did not allege that Ono failed to disclose the detecting step through **any** data line, or through **Ono**’s data line, as Solas now suggests. Sol. Resp. at 11-12. Rather, the applicants argued that Ono did not disclose the “detecting” limitation because it was not performed “through **the** data line” of the claims, i.e., the same line used to perform the other two functions. Dkt. 67-8 (Ex. 7) at 32. Moreover, Solas does not provide any definition for what a “data line” is, or why Ono’s grounding line is not one (other than failing to label it as such). Nor could it, because just like the “grounding” line that the patentees distinguished, the “Vref” line Solas points to for infringement is also not labeled a “Data” line. *Spectrum Int’l, Inc. v. Sterilite Corp.*, 164 F.3d 1372, 1379 (Fed. Cir. 1998) (“claims may not be construed one way in order to obtain their allowance and in a different way against accused infringers.”).³

E. “before” and “after” (claims 10 and 36)

The only constructions supported by the intrinsic record and common sense are that “before” means “earlier in time (not at the same time)” and “after” means “later in time (not at the

³ Solas’s reliance on *Freeny v. Fossil Group*, Case No. 2:18-CV-00049-JRG-RSP, 2019 WL 2078783 (E.D. Tex. May 10, 2019) is misplaced. In that case, the court found that construing a term to require the same element performs multiple functions was contradicted by embodiments in the specification and would “not make sense in light of the specification’s description of the goal of the invention.” *Id.* at *14-15. In the ’137 patent, the only reading that makes sense is for the “same” data line to perform each function because that is what **every** embodiment discloses. *See* Def. Resp. at 11 (discussing specification disclosures). Solas’s attempts to distinguish the cases cited by Defendants similarly fail. Sol. Resp. at 12. First, Solas ignores the ’137 patent’s limiting language that requires the claimed functions be **through** the data line, which requires transmitting in and out of the same line. Second, Solas fails to identify any intrinsic support in the claims, specification, or prosecution history that would support its broader interpretation.

same time).” Def. Op. at 12-14; Def. Resp. at 11-13. In contrast, Solas’s constructions, that “before” and “after” include events that are “overlapping in time,” have no evidentiary support.⁴ First, Solas does not cite *any* part of the intrinsic record using the common terms “before” and “after” to include events that overlap in time. To the contrary, the specification uses “before” and “after” to refer to signals that are sequentially provided on the same data line without any overlap. Def. Op. at 13. Second, Solas concedes that the prosecution history excludes signals that are provided “at the same time,” such as when voltages are added to one another and provided to the data line together. Sol. Resp. at 14. Third, Solas admits that its construction is unsupported by the extrinsic evidence, as “Defendants cite four dictionary definitions (Def. [Op.] at 13, n. 11), and *none of them mention ‘overlap’ or ‘without any overlap in time.’*” *Id.* at 13.

III. ‘891 PATENT

A. “current measuring” (claims 1, 3)

Solas concedes that “current measuring does not mean voltage measuring.” Sol. Resp. at 16. This should end the dispute and Defendants’ construction should be adopted. Solas should also be held to its express statements that it will not argue this term is satisfied “by something that measures a different physical quantity [than current], like voltage, time or temperature.” *Id.* at 17. To be clear, Defendants do not “attack a strawman” by construing this term to require measuring actual currents, not voltages. *Id.* at 16-17. In related German proceedings, Solas expressly argued that measuring the “*voltage* at the source electrode *at the beginning of the measurement* and the *voltage* at the source electrode *at the end of the measurement*” is a current measurement of the

⁴ The Court should reject Solas’s new “overlap” constructions outright, as they were not disclosed in compliance with the Court’s scheduling order. *See* Dkt. 50, 72. To avoid that conclusion, Solas misleads the Court and asserts that Defendants offered a “shadow construction” in its opening brief that excluded Solas’s interpretation. Solas knew *exactly* what the dispute was when it filed its opening brief as shown in the three pages of argument regarding events “overlapping in time” that it buried in its expert’s entirely conclusory opening declaration. Def. Resp. at 12-13.

claims. Ex. 39 at 29, 37 (arguing a “measurement of the voltage change over time corresponds to a current measurement”). Solas should not be permitted to argue one thing to avoid construction, only to turn around and argue the opposite to the jury. Solas’s remaining arguments simply rehash its opening brief, which Defendants already responded to. Def. Resp. at 13-15. Moreover, while Solas alleges again that there might be ambiguity or confusion between “current” and “not voltage” in Defendants’ construction (Sol. Resp. at 17), Solas’s expert disagrees. Flasck Dep. at 154:21-24 (“Q. No one -- no person of ordinary skill in the art is going to get confused between what is a current and what is a voltage, is that fair? A. That’s fair.”).

B. “a third thin film transistor which during driving its gate ...” (claims 1, 3)

The grammar and syntax of the claim support only Defendants’ construction: the “providing” step of the claims must be performed “during driving” the gate of the third transistor. Def. Op. at 16-19; Def. Resp. at 15-18. Solas does not dispute that an analysis of the ’891 patent’s only disclosed figure confirms Defendants’ construction. Holberg Op. Decl. ¶¶ 57-61; Def. Op. at 18.

Solas argues that there is no express rule that semicolons separate distinct limitations. Nor do Defendants suggest that is the case. For example, as Solas points out in *Credle v. Bond*, the Federal Circuit relied on commas to find the beginning of a new distinct step in those claims. 25 F.3d 1566, 1571 (Fed. Cir. 1994). But the patent in that case did not use any semicolons, instead substituting them for commas to separate claim limitations. *Id.* (showing claim language). In contrast, when a claim uses **both** commas and semicolons, like in the ’891 patent, the conventional rule is that the semicolons separate distinct limitations and commas are used to list multiple elements of the same limitation. *In re Affinity Labs of Texas, LLC*, 856 F.3d 902, 907 (Fed. Cir. 2017); *3Com Corp. v. D-Link Sys., Inc.*, 473 F. Supp. 2d 1001, 1012 (N.D. Cal. 2007); Def. Op. at 17-18. Solas’s expert confirmed that he follows that convention in his own patents. Flasck Dep. at 133:18-135:20; *see also id.* at 129:2-132:8 (agreeing same convention used in the ’137 patent).

To depart from the plain meaning of the claim’s grammar and syntax, Solas would need to identify something in the intrinsic evidence supporting that the “providing” step is performed when the gate of the third transistor is *not* driven. There is no such disclosure. Solas argues that the patent “contemplates a mode where the claimed ‘providing’ by the CMVR occurs whether or not the third transistor is being driven,” but the only support that Solas cites is the conclusory testimony of its expert. Sol. Resp. at 16, citing Flasck ¶¶ 14-15 (referring to a “Storage Mode”). On cross-examination, Solas’s expert testified this “Storage Mode” was just his interpretation and was not expressly disclosed anywhere in the patent. Flasck Dep. at 180:11-181:13.

C. “wherein all above mentioned elements of the driving circuit are located at a same side of said light emitting diode” (claim 3)

The parties agree that “located” in claim 3 requires an electrical connection as reflected in both parties’ constructions, and that there are two “sides” to a light emitting diode, an anode and a cathode. Flasck Dep. at 159:10-13. Defendants’ construction thus reflects the undisputed meaning of the words the patentee chose to define its invention. In contrast, Solas’s construction adds new words to the claim and, for that reason alone, must be rejected. *Source Vagabond Sys. Ltd. v. Hydrapak, Inc.*, 753 F.3d 1291, 1299 (Fed. Cir. 2014); Def. Op. at 20; Def. Resp. at 19.

Solas tries to rescue its construction by claiming that a *different* clause (that it did not propose to construe) in claim 3 discusses physical elements, i.e., “so that no contacts must be guided through a semiconductor material of the diode.” Sol. Resp. at 18. But this language supports Defendants’ construction, not Solas’s. During prosecution, the applicant expressly stated that the requirement ““that no contacts must be guided through a semiconducting material of the diode”” of claim 3 simply “*necessitates placing all elements on the same side in the circuit diagram[.]*” Dkt. 67-12 (Ex. 11) at 8; *see also* ’891 patent at 2:26-28 (“all circuit parts at one side of

the LED element, *so that* a conventional layer sequence can be used during manufacture”). Likewise, the patentee argued that requirement is “clearly shown in the drawings.” Dkt. 67-14 (Ex. 13) at 4. As Solas admits, the only disclosed figure does not show any physical layers or layout of the disclosed circuit, *only the electrical connections* to the anode side of the LED as required by Defendants’ construction. Dkt. 68 (“Sol. Op.”) at 20. Solas cites a portion of the prosecution history wherein the applicant stated that claim 3 is not “just about the physical layers,” (Sol. Resp. at 19-20) but that is a far cry from the type of clear and unambiguous statement that would merit *adding* the words “physical” and “layer” into the claims. Likewise, the specification disclosure relied on by Solas referring to a “conventional layer sequence” is simply what “*can be*” used to create the disclosed circuit, not what is required by the claims. *Id.* at 18; ’891 patent at 2:26-28.

IV. ’068 PATENT

A. “formed on said plurality of supply lines along said plurality of supply lines” (claim 1) / “connected to said plurality of supply lines along said plurality of supply lines” (claim 13)

Defendants’ construction — “over the length of” — is the only meaning of “along” that takes into account the entire intrinsic record, including the surrounding claim language as well as the embodiments, purpose and inventive aspect as disclosed by the specification. Def. Op. at 21-24; Def. Resp. at 19-21. Solas argues that because there are broader dictionary definitions, the ordinary meaning must encompass them absent disclaimer or lexicography. Sol. Resp. at 21. That is incorrect. “Under *Phillips*, the rule that a court will give a claim term the full range of its ordinary meaning, *does not mean* that the term will presumptively receive its broadest dictionary definition or the aggregate of multiple dictionary definitions.” *Free Motion Fitness, Inc. v. Cybex Int’l, Inc.*, 423 F.3d 1343, 1348–49 (Fed. Cir. 2005) (internal quotations and citations omitted). Rather, when there are multiple potential ordinary meanings, “the task is to scrutinize the intrinsic evidence in order to determine the most appropriate definition.” *Id.* It is not necessary to find

disclaimer or lexicography to select the correct definition instead of the broadest one. *See, e.g., PPC Broadband, Inc. v. Corning Optical Commc'ns RF, LLC*, No. 2015-1364, 2016 WL 692369, at *2-5 (Fed. Cir. 2016) (“the fact that ‘around’ has multiple dictionary meanings does not mean that all of these meanings are reasonable interpretations in light of this specification.”); *Trs. of Columbia Univ. of N.Y. v. Symantec Corp.*, 811 F.3d 1359, 1364 (Fed. Cir. 2016) (terms can be defined in the specification “by implication”).

The parties agree there are two relevant embodiments that illuminate the meaning of “along” in “feed interconnections ... along said plurality of supply lines.” Def. Op. at 22-23; Dkt. 70-1 (“Flasck Resp. Decl.”) ¶¶ 28-31 (“the patent discloses two relevant embodiments”). Solas argues that a “possible interpretation of” Defendants’ construction could exclude the second embodiment shown in Figure 20. Sol. Resp. at 22-23. Not so. In the second embodiment, the feed interconnections intersect and connect to each supply line at every other pixel, over the length of the supply lines. Flasck Dep. at 211:1-12, 211:16-24; Def. Op. at 23; ’068 patent at Fig. 20, 22:50-56, 23:1-12. These connections are over the length of, or “along,” the supply lines in the same way that there may be houses along a street, even though they are not one continuous structure.

Solas’s construction—which includes “or direction of”—seeks to capture feed interconnections that are connected to supply lines at an arbitrary point on one side of a display. Def. Op. at 22-23; Def. Resp. at 19-21. Solas alleges that Defendants attack a “strawman” (Sol. Resp. at 23-24), but if that were true, Solas would exclude such an interpretation from the scope of the claims, but it does not. *See* Dkt. 71-6 (Ex. 32) at 48 (showing Solas’s infringement contentions on this term). Solas cannot cite to a single disclosure in the specification in support of its interpretation. There are none, and for good reason. As Solas’s expert admits, if there was only one feed interconnection at an arbitrary point on the edge of the supply lines, “you would expect a voltage

drop and a signal delay going to the right edge of the display,” which is contrary to the “purpose of the [feed interconnections, which] is to *reduce* the voltage drop.” Flasck Dep. at 213:19-215:10; Holberg Op. Decl. ¶¶ 80-87

B. “patterned together” (claims 1 and 13)

Defendants’ constructions of “patterned” and “patterned together” are based directly on repeated disclosures in the specification and are consistent with the undisputed textbook meanings of the terms. Solas’s attempt to broaden the claims to cover forming components in different layers at different times, and Solas’s construction of “patterned together” to mean “patterned to fit together,” amounts to a wholesale rewriting of the claim. This violates nearly every tenet of claim construction and must be rejected. Def. Op. at 26; *Source Vagabond*, 753 F.3d at 1301.

To start, Solas argues that Defendants are “plain wrong” that the specification only describes patterning in the context of forming a single layer. Sol. Resp. at 24. In support, Solas repeats its argument that the specification describes a “drain layer” that can be “two or more layers.” *Id.* at 24-25. But once again, Solas fails to consider the surrounding context, where the specification explains that the “drain layer” is a “*single* conductive film,” dooming Solas’s construction. Def. Resp. at 22. Indeed, Solas’s expert recanted Solas’s position at his deposition, explaining that in his opinion the “drain layer” in the specification was defined, as a matter of lexicography, as a “single conductive film.” Flasck Dep. at 126:8-128:21; ’068 patent at 9:36-49.

Next, Solas argues that Defendants’ construction would conflict with dependent claims 2 and 14, which require “a plurality of scan lines which are *patterned together* with the sources and drains of the plurality of driving transistors.” ’068 patent at claims 2, 14, 2:61-65 (same as claim 2), 3:55-59 (same as claim 14); Sol. Resp. at 25-26. This is incorrect. Every embodiment showing the scan lines patterned with the sources and drains consistently demonstrates that those components are formed at the same time “by patterning a single conductive film.” *See* ’068 patent at

9:36-49, 25:28-34, Figs. 4, 7, 8, 10, 11, 22, 24; Def. Resp. at 23 (annotated Fig. 5 showing scan lines and sources and drains in same drain layer (blue)).

Solas also asks the Court to construe “patterned together,” contrary to the teachings of the specification, based on another requirement in claims 2 and 14 that the “scan lines are ... arrayed to cross said plurality of supply lines via the gate insulating film.” Sol. Resp. at 26. Solas argues that this limitation only makes sense if the scan lines and supply lines are patterned “in different layers formed at different times” based on the conclusory testimony of its expert. *Id.* But Solas’s expert admitted that (1) he doesn’t identify “where such an embodiment is disclosed” and (2) his interpretation is “not shown in any of the figures.” Flasck Dep. at 203:19-204:19. Indeed, every disclosed embodiment and figure contradicts Solas’s interpretation of claims 2 and 14. The scan lines and supply lines are uniformly described and shown in the specification as formed in the same layer, at the same time, and arranged in parallel. ’068 patent at 5:61-67, 9:36-49, 22:60-65, 25:28-34, Figures 1-4, 8, 10-11, 20-22; Flasck Dep. at 127:1-128:5, 128:13-21. Solas errs in presuming there must be a broader and non-limiting reading of “patterned together” to preserve the validity of these dependent claims, which find no support in the specification. But courts cannot rewrite independent claims contrary to their ordinary meaning simply to avoid a conflict with a dependent claim. *See Cave Consulting Grp., LLC v. OptumInsight, Inc.*, 725 F. App’x 988, 994 (Fed. Cir. 2018); *Kruse Tech. P’ship v. Volkswagen AG*, 544 F. App’x 943, 952 (Fed. Cir. 2013) (“This court will not redraft claim 1 contrary to its ordinary meaning to avoid a conflict with claim 4.”); *N. Am. Vaccine*, 7 F.3d at 1577 (Fed. Cir. 1993).⁵ Nor should the Court do so here.

⁵ Failing to find support in the intrinsic record for its construction, Solas relies heavily on prior art U.S. Patent No. 7,250,722 (Dkt. 68-16, the “’722 patent”) as purportedly using the term “patterned together” to mean “patterned to fit together.” Sol. Resp. at 25-26. Not so. First, as Dr. Holberg explains in detail, the ’722 patent uses the term consistent with Defendants’ construction to mean

C. “signal lines” (claims 1 and 13)

Solas’s primary argument is that there is no explicit definition or disclaimer of “signal line” in the specification. The disclaimer rule does not apply here because “the ordinary meaning” of signal lines, “when read in the specific context of the specification of the [’068] patent, is limited to” conductive lines supplying a value corresponding to a luminance level. *See UltimatePointer, L.L.C. v. Nintendo Co.*, 816 F.3d 816, 823–24 (Fed. Cir. 2016). The intrinsic record overwhelmingly supports Defendants’ construction and refutes Solas’s. Def. Op. 27-28; Def. Resp. 27-29; Flasck Dep. at 208:1-5 (luminance level and gray level are interchangeable). There is no disclosure or suggestion in the ’068 patent of a signal line that carries anything other than a value corresponding to a luminance level. *See id.* at 215:12-216:19. Solas argues that Defendants import limitations related to light emission into claim 1 (Sol. Resp. at 28), but Defendants’ construction simply defines “signal lines” as it is consistently used in the specification. That does not amount to importing limitations. *UltimatePointer*, 816 F.3d at 823–24.

D. “feed interconnections” (claims 1, 10, 12, 13, 17)

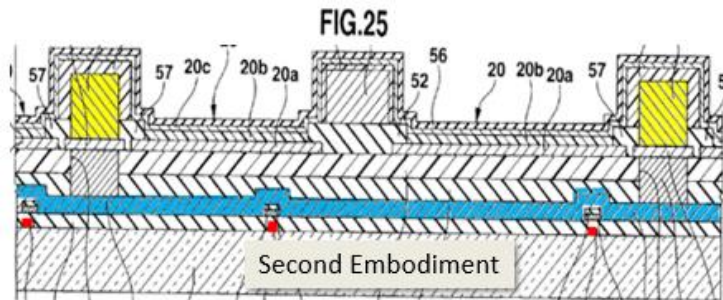
Solas does not dispute that the two-word term “feed interconnections” was coined in the ’068 patent. Def. Op. at 28-30. Therefore, it cannot be construed more broadly than the specification’s disclosure, which only describes and depicts the feed interconnections as conductive structures in a layer different than the gates, sources, and drains of the thin-film transistors. *Id.*; Def. Resp. at 29-30; *Vehicle IP, LLC v. Celco P’ship*, 757 F. App’x 954, 958 (Fed. Cir. 2019).

Solas’s contrary arguments fail. *First*, Solas contends that the words “interconnection”

“patterned at the same time.” Dkt. 71-2 (“Holberg Resp. Decl.”) ¶¶ 16-17. Solas’s assertion otherwise is based on a clear draftsman error in Figure 8 (which is corrected in a different, related embodiment). Holberg Resp. Decl. ¶¶ 18-19. Second, the words “to fit” and Solas’s concept of “fitting” are found nowhere in the ’722 patent. Finally, other prior art from Casio, the original assignee of the ’068 patent, demonstrate that the original Casio inventors intended for “patterned together” to mean “patterned at the same time.” *Id.* ¶¶ 20-21 (discussing Dkt. 71-7, 71-8).

and “feed” separately have plain meanings, and so the Court should simply merge those definitions in construing “feed interconnection.” Sol. Resp. at 28. Solas misses the point. The question is whether this coined term *as a whole* has a plain meaning to those of ordinary skill in the art, and because it does not, the term “cannot be construed broader than the disclosure in the specification” even without disclaimer. *Indacon, Inc. v. Facebook, Inc.*, 824 F.3d 1352, 1357 (Fed. Cir. 2016) (construing “custom link”); *Barkan Wireless IP Holdings, L.P. v. Samsung Elecs. Co.*, No. 2:18-CV-28-JRG, 2019 WL 497902, at *13 (E.D. Tex. Feb. 7, 2019) (construing “coordination center”).

Second, Solas argues that the feed interconnections are formed separately from the gates, sources and drains only with reference to the “First Embodiment.” Sol. Resp. 29. Solas is wrong. The entire intrinsic record—the background and summary of the invention, both disclosed embodiments, and the prosecution history—consistently and repeatedly disclose the feed interconnections are formed in a different layer than the gates, sources, and drains. Def. Op. at 28-30; Def. Resp. at 29-30; Holberg Op. Decl. ¶¶ 116-125, 84; *Virnetx, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1317-19 (Fed. Cir. 2014). In particular, the “Second Embodiment” is shown in annotated Figure 25 here, and the feed interconnections (yellow) are plainly formed separately from the source/drain layer (blue) and the gate layer (red squares under the blue). ’068 patent at Fig. 25 (annotated); *see also id.* at Figs. 23-24, 26:62-66 (“*feed interconnections 90* are formed by electroplating and are therefore *much thicker than the ... gates, sources, and drains* of the transistors 21 to 23.”), 27:14-18.



V. CONCLUSION

For the foregoing reasons, Defendants respectfully request that the Court adopt their proposed constructions of the disputed claim terms.

Respectfully Submitted

/s/Jennifer H. Doan

Jennifer H. Doan
Texas Bar No. 08809050
Joshua R. Thane
Texas Bar No. 24060713
J. Randy Roeser
Texas Bar No. 24089377
Cole A. Riddell
Texas Bar No. 24105423
HALTOM & DOAN
6500 Summerhill Road, Suite 100
Texarkana, Texas 75503
Tel: 903.255.1000
Fax: 903.255.0800
Email: jdoan@haltomdoan.com
Email: jthane@haltomdoan.com
Email: rroeser@haltomdoan.com
Email: criddell@haltomdoan.com

Douglas E. Lumish
California State Bar No. 183863
Email: doug.lumish@lw.com
Gabriel S. Gross
California State Bar No. 254672
Email: gabe.gross@lw.com
Andrew Max Goldberg
California State Bar No. 307254
Email: drew.goldberg@lw.com
LATHAM & WATKINS LLP
140 Scott Drive
Menlo Park, California 94025
Tel: 650.328.4600
Fax: 650.463.2600

Joseph H. Lee
California State Bar No. 248046
Email: joseph.lee@lw.com
LATHAM & WATKINS LLP
650 Town Center Drive, 20th Floor
Costa Mesa, California 92626
Tel: 714.540.1235
Fax: 714.755.8290

Blake R. Davis
California State Bar No. 294360
Email: blake.davis@lw.com
LATHAM & WATKINS LLP
505 Montgomery Street, Suite 2000
San Francisco, California 94111
Tel: 415.391.0600
Fax: 415.395.8095

**ATTORNEYS FOR DEFENDANTS
LG DISPLAY CO., LTD.;
LG ELECTRONICS, INC.; and
SONY CORPORATION**

Gregory S. Gewirtz (*pro hac vice* pending)
Email: ggewirtz@lernerdavid.com
Jonathan A. David (*pro hac vice* pending)
Email: jdavid@lernerdavid.com
**LERNER, DAVID, LITTENBERG,
KRUMHOLZ & MENTLIK, LLP**
20 Commerce Drive
Cranford, New Jersey 07016
Tel: 908.654.5000
Fax: 908.654.7866
Email: litigation@lernerdavid.com

**ATTORNEYS FOR DEFENDANT
SONY CORPORATION**

CERTIFICATE OF SERVICE

The undersigned certifies that on the 24th day of April, 2020, I electronically filed this document with the Clerk of Court via the Court's CM/ECF system which will send notification of such filing to all counsel of record, all of whom have consented to electronic service in this action.

/s/ Jennifer H. Doan
Jennifer H. Doan